RCRA Compliance Evaluation Inspection

Eastern Plating
1200 South Baylis Street
Baltimore, MD 21224
(410) 342-4107

County: Baltimore City

EPA ID No. MDD063215453
SIC Code: 3471
NAICS Code: 332813

Date of Inspection: December 11, 2007

EPA Representatives:

Stacie L. Peterson, Environmental Engineer
RCRA Compliance & Enforcement Branch
Waste & Chemical Management Division
(215) 814-5173

Jeanna R. Henry, Environmental Scientist
RCRA Compliance & Enforcement Branch
Waste & Chemicals Management Division
(215) 814-2820

State Representatives:

Anthony Enweze (MDE)
(410) 537-3400

Paul Lang (MDE)
(410) 537-3400

Facility Representatives:

Mike Castor, General Manager

Wellington Abhilashi, Chemist

Stacie Peterson

Stacie Peterson, Environmental Engineer
Waste & Chemicals Management Division
January 3, 2008

Table of Contents

1.0 Introduction

On December 11, 2007, the United States Environmental Protection Agency, Region III (EPA), Waste & Chemicals Management Division, RCRA Compliance & Enforcement Branch conducted an unannounced Compliance Evaluation Inspection (CEI) under the Resource Conservation & Recovery Act (RCRA), as amended, 42 U.S.C. Sections 6901 et seq. of Eastern Plating Company, Inc. ("Eastern" or "Facility"). USEPA representatives Ms. Stacie Peterson and Ms. Jeanna Henry were accompanied by Mr. Anthony Enweze and Mr. Paul Lang from the Maryland Department of the Environment (MDE). The Facility was represented by Mr. Mike Castor, General Manager, and Mr. Wellington Abhilashi, Chemist, who has been with the Facility for 6 months. In addition, an inspection of another Eastern Plating, owned by the same owner as the Baylis Street location, was also performed on December 11, 2007.

The inspection team arrived to the Facility at approximately 1 pm. Mr. Abhilashi escorted the inspectors to an office building where Mr. Castor was located. The inspectors identified themselves and presented their credentials to Mr. Castor and explained the purpose of the RCRA Subtitle C inspection to be conducted at Eastern. The inspection included an evaluation of the Facility's manufacturing processes, the handling/management of the waste streams generated during these processes, and the Facility's compliance with Federal and State hazardous waste regulations.

All information included in this report are the results of statements made by the Facility representatives, materials shown to the inspectors by the Facility representatives during the inspection, information and documents provided by the Facility representatives to the EPA during or after the inspection, and a review of the Facility's EPA and State records.

2.0 General Facility Information

Eastern is located in Baltimore City at 1200 South Baylis Street in Baltimore, Maryland. The Facility is owned by Ms. Sara Castor, and the general manager is Mr. Michael Castor. The Facility has been in operation at the 1200 South Baylis address since 1972. Another Eastern Plating manufacturing facility that is owned by Ms. Castor is located on Pulaski Highway in Baltimore County. The Baylis Street Facility has 20-25 employees that work one shift (7:30 am - 5 pm) five days per week. The size of the Facility is 5,000 square feet.

3.0 Process Description

Eastern is an electroplating facility that performs sulfuric acid and chromic acid anodizing, glass beading, and chromic conversion. In terms of the anodizing process, the Facility receives aluminum parts and loads them onto racks. The parts are first placed into a cleaner tank which uses an alkaline product called Oakite NSS. The parts are then placed into a deoxidizer bath, a caustic soda bath, either a sulfuric acid or chromic acid bath, and a nitric acid bath. After the parts have been removed from the nitric acid bath, they are placed into a dye tank. After dying, the parts are placed into the final bath, either a nickel seal or sodium dichromate seal tank.

The Facility also performs glass beading for one of its customers. This process involves sand blasting bare aluminum to create a lusterless surface.

The Facility performs chromic conversion, which is an electroless (no current) process in

which the parts are dipped into baths for a conversion reaction between the aluminum and the chrome.

The wastewater from the plating lines is neutralized in the Facility's onsite wastewater treatment plant and then is discharged to the sewer system. According to Facility representatives, Eastern has a pretreatment permit.

4.0 Hazardous and Universal Waste Generation

Within the EPA Online Tracking Information System (OTIS) database, Eastern is listed as a Large Quantity Generator (LQG) of hazardous waste. During the inspection, Mr. Castor stated that the Facility uses the Cardinal Group to pump out the spent chemical and any hazardous wastewaters directly from the tanks (approximately once per year). Mr. Castor also explained that after the tanks have been pumped, any rinse water that is generated from further cleaning out the tanks and removing the sludge on the bottom of the tanks is manifested and disposed of as a hazardous waste. In addition, any rags or filters that have been used to clean out the baths are also manifested and disposed of as a hazardous waste.

Facility representatives stated during the open conference that the Facility operates a 90/180 day hazardous waste storage area for filters and rags that have been used to clean out the baths. It was undetermined during the inspection if this area is inspected weekly.

Universal Waste:

- Used Lamps - Mr. Castor stated that the Facility uses fluorescent lamps, and all used lamps are thrown into the municipal trash.
- Computers/Electronics - Broken computers are stored in a back room on-site.
- Used Batteries - Used vehicle batteries for the forklifts are managed by a contractor.

Used Oil:

- No used oil is generated at the Facility.

Aerosol Cans:

In the opening conference, Facility representatives stated that no aerosol cans are used at the Facility. However, during the inspection, aerosol cans were observed. Mr. Abhilashi was unsure of how used and "empty" aerosol cans are disposed of.

5.0 Inspection Observations

The tour of the Facility, which was led by Mr. Abhilashi, began at 2:00 pm and resulted in the following observations. Please note that during the inspection the EPA inspector experienced problems with EPA's camera. As a result, only Photo 1 was taken using EPA's camera. The remaining photos (Photos 2 - 15) were taken by Mr. Enweze using MDE's camera. These photos were provided to Ms. Peterson via e-mail after the inspection.

Next to the electric meters and anodizing tank, ten 55-gallon drums and an overpack container were observed (See Attachment 1, Photo 1). All of the containers appeared to be closed, however, it was not possible to inspect all the containers due to limited spacing around the containers. One of the 55-gallon drums was labeled "Rinse Chromic" and dated 12/7/07 (Photos 2). Another drum, dated 12/7/07, had a torn label, in which the word "Chromic" was observed (Photo 3). Another drum, dated 10/30/07, was labeled "Chromic Rinse" (Photo 4). According to Mr. Abhilashi, when the chromic acid tank is pumped out, sediment remains on the bottom of the tank. Rinse water from the chromic acid rinse tank is used to remove the sediment and clean out the chromic acid tank. This rinse water is then drummed up for disposal. According to Mr. Abhilashi, the drums labeled "Rinse Chromic," "Chromic Rinse, " and "Chromic" contain this rinse water and were awaiting disposal. Although the inspectors were unable to observe any labels, Mr. Abhilashi stated that one of the drums (which had a cooler on top of it) also contained chromic rinse water. A Material Safety Data Sheet (MSDS) for chromic acid flake, which is used in the baths, is included as Attachment 3.

The overpack container was labeled "Caustic Etch Sludge" and was dated 5/12/06 (Photo 5). Mr. Abhilashi stated that this container held sludge from the caustic tank. Mr. Abhilashi identified three of the drums within this area as containing product. Some of the labels on the drums that Mr. Abhilashi stated contained product are included as Photos 6 and 7 in Attachment 1. Due to the limited spacing and the location of the drums, Mr. Abhilashi was unable to identify the contents of the remaining two drums, which were located in the far right-hand corner. No labels could be observed. A diagram of the layout of this area is included as Attachment 2.

During the inspection, three methyl ethyl ketone (MEK) parts cleaners, of which only two appeared to be in use, were observed. Near these parts cleaners, two 55-gallon drums were observed (Photo 8). One of the drums, which was approximately 1/4 full, had a closed funnel in the bung hole and was undated. The drum was not labeled "Hazardous Waste" or with any words identifying the contents. The only label on the drum was the MEK product label. The other drum had a hand pump in the bung hole. According to Mr. Abhilashi, the drum with the funnel contained waste MEK from the parts cleaners while the drum with the hand pump contained new product. Mr. Abhilashi stated that a full drum of waste MEK is generated approximately every one to two months. Furthermore, he explained that the waste MEK had been transported to the Eastern Plating Pulaski Highway facility and was being reclaimed in the Pulaski Highway facility's distillation unit. A MSDS for MEK is included as Attachment 4.

The inspectors observed gloves on a table near the parts cleaners. The inspectors asked what was done with the gloves that are used to place and remove the parts from the MEK parts cleaners after they can no longer be used. Mr. Abhilashi stated that they are disposed of in the municipal trash.

Near the two 55-gallon drums, one 15-20 gallon closed, red container was observed (Photo 9). Within the container, rags were observed (Photo 10). Mr. Abhilashi stated that the container held rags that had been used to dry off and wipe the MEK from the parts that had been removed from the parts cleaners. The container was unlabeled and undated. According to Mr. Abhilashi, used rags are disposed of in the municipal trash.

Near the wastewater treatment area, one open 55-gallon container was observed (Photo 11). The drum contained pump filters, in which Mr. Abhilashi stated that they had been used primarily with the chromic acid tank (Photo 12). He further stated that this drum would be

disposed of as hazardous waste. The drum was unlabeled and undated.

Within the maintenance area, a number of aerosol cans were observed (Photo 13). Mr. Abhilashi was unsure as to how used and "empty" aerosol cans were disposed. One of the aerosol cans observed was Aervoe Rust Proofing Paint. The product labeled indicated the contents were "Extremely Flammable" and contained xylene, acetone, and propellent.

Some areas of preanodized parts are not to be plated, so a lacquer must be applied to these areas to protect them from anodizing during the dipping process. As the lacquer is being applied, if any paint is accidentally placed in an area that is to be anodized, the lacquer is removed by MEK. Applying the MEK is done either using Q-tips or brushes, although brushes are primarily used. This process of applying lacquer and removing any accidental lacquer with MEK occurs in the masking room. Although it was not confirmed as what is done with used Q-tips and paint brushes, MEK-contaminated Q-tips generated at the Eastern Plating Pulaski Highway facility are disposed of in the municipal trash.

The Facility's lab, which is used to perform analyses to determine bath concentrations, was located in a separate building from the plating operations (Photo 14). Samples that are collected from the baths are placed back into the baths after any analyses have been performed (Photo 15). All titration waste is poured down into the sink. Although Mr. Abhilashi was unsure as to where the sink goes, Mr. Castor stated that the sink wastewater goes into the Facility's onsite wastewater treatment plant. Please note that this information regarding the discharge location of the sink wastewater was not verified during the inspection, and follow-up information may be necessary to confirm if the wastewater discharges into the onsite wastewater treatment plant.

6.0 Records Review

6.1 Manifests and LDR Forms

Manifests and Land Disposal Restriction Forms for 2005 - Present were requested during the inspection. Records were not observed at the time of the inspection. Mr. Abhilashi stated he would provide such records via regular mail after the inspection.

6.2 Weekly Inspections for Hazardous Waste Storage Area

It was not clear during the inspection if weekly inspections of hazardous waste storage area(s) were being conducted. However, weekly inspections logs for hazardous waste areas were requested during the inspection. The inspection logs were not observed at the time of the inspection. Mr. Abhilashi stated he would provide the logs, along with the names of the individuals that perform such inspections, via regular mail after the inspection.

6.3 Training Records

Training records (including job titles, job descriptions, and a description of required training for those employees that manage hazardous waste) were requested during the inspection. The records were not observed at the time of the inspection. Mr. Abhilashi stated he would provide the records via regular mail after the inspection.

6.4 Contingency Plan

The Facility Contingency Plan was requested during the inspection. The plan was not observed at the time of the inspection. Mr. Abhilashi stated he would provide the plan via regular mail after the inspection.

6.5 Biennial Report

The 2005 Biennial Report was requested during the inspection. The report was not observed at the time of the inspection. Mr. Abhilashi stated he would provide the report via regular mail after the inspection.

7.0 Closing with Facility Representative

The following issues were discussed with Mr. Abhilashi and Mr. Castor:

- Transporting spent MEK from one facility to another;
- Identification of contents of containers observed near electric meters and anodizing tank;
- Possible greater than 90-day storage of container labeled "Caustic Etch Sludge" near electric meters and anodizing tank;
- Labeling of chromic rinse containers near electric meters and anodizing tank;
- Labeling and dating of spent MEK containers and residues, chromic acid-contaminated pump filters;
- Open container of contaminated pump filters;
- Rag container - Unlabeled, and undated;
- Waste determination and proper disposal of spent MEK, aerosol cans, used lamps, rags, Q-tips, and gloves;
- Weekly inspections of hazardous waste storage area(s);
- Records - To Be Provided

8.0 Attachments

Attachment 1	Photographic Log
Attachment 2	Diagram of Containers Observed Near Electric Meters and Anodizing Tank
Attachment 3	MSDS for Chromic Acid Flake
Attachment 4	MSDS for MEK